# CLIFFORD World-Class Auto Security\*\*\*

# AvantGuard

Owner's Manual

### WARNING

The AvantGuard III system is designed to be used ONLY on a fuel-injected, petrol or diesel powered vehicle with an automatic transmission. Installing AvantGuard III on a vehicle that has a manual transmission poses an EXTREME SAFETY RISK! Never install a Clifford remote engine starting product on a manual transmission vehicle.

Always exercise good judgment and common sense when using the remote starter:

- NEVER remotely start the vehicle in an enclosed area without sufficient ventilation.
- NEVER allow children access to the remote controls.
- NEVER engage the ShortStop nor one or both AutoStart features if the vehicle is in an enclosed area without adequate ventilation.
- NEVER remotely start or use the ShortStop feature with a person or pet in the car (exhaust fumes may leak into the passenger compartment).
- In case of transmission slippage, NEVER remotely start the engine if you or someone else is directly behind or in front of the vehicle.



World-Class Auto Security™

The AvantGuard III system is covered by one or more of the following Clifford Electronics U.S.A. patents: 4,158,874; 4,233,642; 4,327,444; 4,383,242; 4,430,685; 4,845,464; 4,887,064; 4,890,108; 4,922,224; 4,997,053; 5,081,667; 5,146,215; 5,157,375, 5,467,070 and other patents pending.

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#### Standard Features of the AvantGuard III

- ✓ Lifetime Warranty For as long as you own the vehicle, Clifford Electronics will repair or replace the control unit and remote controls free of charge (see warranty card for full details).
- ▼ FACT—False Alarm Control and Test One of many patented Clifford innovations, FACT absolutely, positively puts an end to recurring false alarms.
- ☑ A Pair of 4-Button/16-Channel Remote Controls Fingertip command from a distance. Each remote has a unique high-gloss rosewood finish that looks as smart as the electronics inside.
- ✓ Anti-CodeGrabbing (ACG) with Random Code Encryption— Today's criminals are shifting from code scanning to a new, more efficient method of electronic thievery: "code-grabbing." When you use a car alarm remote, it transmits a digital code to the alarm. A thief with a code-grabber can record that code from hundreds of metres away, then play it back when you're gone to disarm the alarm and unlock the doors. Within seconds, your car is just another theft statistic. Fortunately, Clifford's Anti-CodeGrabbing (ACG) randomly changes the transmitted code every time you press any of the remote control buttons. And since these codes are selected by the system's microprocessor from an electronic file containing several trillion codes, the remote control NEVER sends the same code twice, and the system control unit NEVER accepts the same code twice. That makes code-grabbing useless against Clifford systems.
- ✓ Maximum Range AvantGuard III's ElectroLoop Antenna maximises remote control range.

#### Remote Engine Starting Features

- ☑ Remote Engine Starting— Just a press of a button safely starts and idles your vehicle's engine for up to 30 minutes for maximum heating/cooling of the passenger compartment. The side lights flash and then stay on while the engine idles for clear, on-going visual confirmation from a distance.
- ✓ Automatic Safety Checks Ensures that all of the following safety conditions are met or your vehicle will not be remotely started:
  - Transmission must be in park
  - Engine and ignition must be off
  - Engine must not be overheated
  - Bonnet must be closed

#### Remote Engine Starting Features (cont.)

- Anti-Theft Measures If the alarm is triggered, the system immediately shuts down the engine, and immobilises the starter motor and ignition system. Even if the system is disarmed, the engine will be shut down if any of the following occur:
  - The transmission is moved out of the "PARK" position
  - The brake pedal is pressed
  - Engine RPM exceeds a certain threshold
  - The bonnet is opened
- ✓ Cold Weather Cranking Cranks the engine for up to 10 seconds or until it starts, whichever occurs first. If the engine does not start, or starts and then stalls, the system will try to restart the engine up to two additional times.
- ✓ **AutoShutDown** Automatically shuts down the engine after 30 minutes. This extended runtime provides the maximum heating/cooling effect.
- ✓ StarterGuard—Prevents accidental grinding of the starter motor if you inadvertently turn the ignition switch to the starter position while the engine is running under the control of the AvantGuard III.
- ShortStop Now you won't need to shut off the engine when stopping at a convenience store or making a delivery. Just a press on the remote control while the engine is still running and you can remove the keys, exit, remotely lock the doors and arm the alarm without shutting down the engine.
- ✓ Petrol & Diesel Compatibility
   The AvantGuard III works with any automatic transmission vehicle that has either a petrol or diesel engine (diesel engine vehicles require an optional adapter).
- **✓** AutoStart Features— AvantGuard III provides these AutoStart features:
  - Battery Mode You may command the system to continually monitor the vehicle battery when you are going to be away for an extended period of time. If the voltage drops below a preset level, the system will automatically start the engine and recharge the battery. It shuts down the engine once the battery is properly charged or after 30 minutes, whichever occurs first. If needed, the process will repeat every eight hours. AutoStart is automatically canceled as soon as the vehicle is driven.
  - *Temperature Mode* You may set the AvantGuard III to AutoStart your vehicle if the engine temperature drops below 15°F (-9°C).
  - *Dual-Mode* You may set the system to monitor *both* the temperature *and* the voltage and, if either one is needed, the system will AutoStart the engine.
- ✓ Automatic Transmission Required

   The AvantGuard III is intended exclusively for automatic transmission vehicles.

- ☑ Built-In Two-Point AutoImmobiliser For the utmost in theft prevention, two AutoImmobilisation relays interrupt both the starter and ignition while the system is armed. Even if a thief were to pull all the fuses or cut all the wires, both the starter and ignition remain immobilised.
- ✓ Remote Controlled Seat Positioning When you remotely disarm, your AvantGuard III will automatically activate your vehicle's memory seat setting. You can assign any one of up to four memory seat settings to each of up to four different remote controls. For instance, when disarmed with your remote control, AvantGuard III automatically activates the vehicle's memory seat position #1; when disarmed with your spouse's remote control, memory position #2 is automatically activated, and so on in any combination you wish using up to four different remotes and four different memory positions.
- UltraSecure Coded Valet Mode Other alarms use a "hidden" valet switch any thief can find within seconds to turn off the alarm. In contrast, Clifford's UltraSecure Coded Valet Mode provides remarkable security utilising an attractive console-mounted switch. This switch is easy to use and allows you to set your own personal code with up to 1,000 different possibilities. And, any time you wish, you can change your code. No thief can breach the security of Clifford's coded valet switch even if he tries entering codes at random. Why? Because after three incorrect codes are entered, the system immediately sounds its siren, flashes the indicator lights, shuts down the engine (if it was remotely started), immobilises the vehicle's starter and ignition systems and ignores for a certain time any more code entry attempts . . . even if the thief were to actually stumble onto your secret code!
  - Remote Controlled Valet Mode With just a press of a button on your remote control, you can enter or exit valet mode. Side light flashes visually confirm valet mode entry and exit.
- ☑ Extended Accessory Power After you park and turn off the ignition, the AvantGuard III will continue to provide power to your vehicle's power windows, car stereo and any other components on the vehicle's accessory line until one of the doors is opened or for five minutes, whichever occurs first.
- ✓ Full-Time Remote Panic with Automatic Door Locking and Unlocking If you ever feel threatened, a press on the remote will sound the siren, flash the parking lights and unlock the doors of your parked car for quick entry without fumbling with the keys. If you ever need to panic the system while driving, the siren will sound, the lights will flash and the doors will lock to shield you from the assailant.

#### ☑ Smart Self-Powered Siren with Unbreachable Digital ComLink —

Continuous two-way digital communication between the system's control unit and the siren assures that if, at any time, the system fuse is pulled or any siren wire is cut while the system is armed, the siren will instantly activate for five minutes. Yet when the system is disarmed and power is interrupted, the siren will remain silent.

- Smart Self-Powered Circuitry Unlike other battery-backed sirens, the AvantGuard III siren only draws power for its internal battery while you're driving, so it can't drain the battery of your parked car like all other battery backup sirens.
- Automatic Low Battery Warning The siren will audibly warn you if its back-up battery voltage is low or if its internal battery fails to hold a charge.
- Personalised Siren Sounds You may select any combination of 6 different sound patterns for unmistakable recognition from a distance. So if you hear a siren at a distance, you will know for sure whether or not it is your car.
- Ultra-Reliability Clifford Electronics' unique design and rugged construction ensure that the Smart Self-Powered MultiSound Medallion Siren delivers 10 times the reliability of conventional sirens.
- User-Selectable Siren Duration Your choice of a 30- or 60-second siren blast when the alarm is triggered.
- Patented Automatic Noise Abatement Automatically limits alarm sounding to no more than five minutes even if a door is left open in the wake of an intrusion attempt, then automatically resets and re-arms.
- - User-Selectable AutoLock with Smart ReLocking and User-Selectable RPM

    Dependence Automatically locks the doors after you start driving (at about 15-20 mph). If a passenger enters or exits your car while the engine is running, AvantGuard III automatically relocks the doors after you accelerate. If you prefer, you can set the system to automatically lock the doors the instant the ignition is turned on, or you can turn off the AutoLock feature entirely.
  - *User-Selectable AutoUnLock* Automatically unlocks the doors when the ignition is turned off (this feature is user-selectable regardless of the AutoLock setting).
  - Deluxe Remote Keyless Entry in Valet Mode You may use the remote control to lock and unlock the car doors, start the engine and activate accessories even while the system is in valet mode.

- A Pair of Remotely Adjustable Dual-Zone Sensors Both a Digital Dual-Zone Proximity Sensor IV and a Dual-Zone Piezo Sensor giving four times the protection.
  - Digital Dual-Zone Proximity Sensor IV The two sensor zones provide full perimeter protection: If someone is lurking near your car, the system sounds a one-second warning tone, but if a thief leans into the passenger compartment through an open window, the system instantly blasts the siren, flashes the side lights and immobilises the starter and ignition system. You can adjust, test and set sensitivity of each zone of this efficient microprocessor-controlled passenger compartment sensor via a few presses on the remote control. To minimise current draw, this new-generation radar sensor uses only 30% of the power required by other radar sensors, yet provides better sensitivity and far more precise discrimination between genuine threats to your vehicle and everyday environmental conditions that cause other radar sensors to false alarm.
  - Dual-Zone Piezo Sensor Just like the Digital Dual-Zone Proximity Sensor IV, you can adjust and test sensitivity of each zone of this all-electronic vibration/impact sensor via the remote. Unlike other vibration/impact sensors, the sensitivity of the Dual-Zone Piezo Sensor stays where you set it regardless of time or temperature. The warning zone of the Dual-Zone Piezo Sensor has a different sound than that of the Dual-Zone Proximity Sensor for distinct identification.
  - Tonal Confirmation of Remote Sensor Adjustments For the utmost in sensitivity adjustment ease and instant feedback, just press a few buttons on the remote to adjust the sensitivity of each zone of each of the two system sensors. That's all there is to it! Higher and higher pitched tones confirm each sensitivity increase, lower and lower tones confirm each decrease.
  - 32/16-Step Incremental Sensitivity For fine-tuning accuracy, each of the two zones of the Digital Dual-Zone Proximity Sensor IV has a 32-step adjustment range, as does the alarm zone of the Dual-Zone Piezo Sensor. The Piezo Sensor's less critical warning zone utilises 16 steps for adjustment speed and accuracy.
  - Adjust and Test Unobtrusively No repeated arming and disarming, and no siren wailing. You set, adjust and test sensitivity of each sensor and each sensor zone without activating the alarm!
  - Remote Override of Each Proximity Sensor Zone One press of a button on the remote control overrides the Proximity Sensor IV's perimeter warning zone when you need to park in an area with heavy pedestrian traffic. A second press turns off both zones for those times when you must leave a passenger or pet in the vehicle.
- ✓ *SilentNight* This user-selectable feature automatically silences the normal arm and disarm chirps at night, restores them in daylight.
- **QuietChirp** User-selectable soft or full-volume arm/disarm chirps.

- ✓ *User-Selectable NightVision Headlight Automation* All electronics for this popular accessory are built-in to provide all these great features:
  - Safety Above All You'll never again accidentally drive in the dark without the headlights on nor forget to turn the headlights off after parking. For your safety and that of other motorists, when driving at twilight, the car's headlights automatically turn on at dusk and switch off at dawn.
  - *Precision Activation* The headlights are turned on or off only when necessary. Briefly driving under a dark overpass in daylight or quickly passing through a brightly lit area at night *will not* cause the headlights to switch on and off.
  - User-Selectable Automatic Post-Parking Illumination For your safety when parking at night, the headlights will stay on for your choice of any duration between one second and 2 minutes (factory preset to 30 seconds) to light your way in the dark. If you prefer not to have any post-parking illumination, but do want all the other NightVision features, this one particular feature can be programmed off.
  - Complete User Control The NightVision circuitry enhances headlight operation without interfering with normal operation. At any time, you may use the vehicle's headlight switch to override NightVision and turn on the headlights even in broad daylight.
  - RainCheck When the windscreen wipers are turned on, the AvantGuard III automatically turns on the headlights to increase your vehicle's visibility to all other drivers on the road. And you'll never have to worry about accidentally leaving the headlights on after parking.
  - Built-In Remote Headlight Activation Just a press on the remote instantly turns on the headlights for any duration you wish between one second and two minutes.
- ✓ Dual-Mode Chirp Silencing— When you remotely arm or disarm, the siren "chirps" and the side lights flash to confirm system status. Whenever you wish, just a press on the remote will arm and disarm the system silently. It's perfect when parking at night in a quiet residential area. Or, if you prefer, you can turn off the chirps on a long-term basis until you wish to turn them back on.
- ✓ One-Step Reset of All User Features— A simple procedure using the PlainView switch allows you to reset all user programmable features (except programmed remotes and your secret valet code) to their factory presets.
- ☑ Built-In Side Light Flasher The side lights flash to confirm arming, disarming, AutoArming countdown, remote valet entry and exit as well as remote engine starting. For ongoing visual confirmation of engine idling, the side lights stay on.

- Remote Controlled Courtesy Lighting For your safety and convenience, when you remotely disarm your AvantGuard III, the interior lights turn on and stay on until you turn on the ignition or for 30 seconds, whichever occurs first.
- ☑ Remote Window/Sunroof Closure Capability If your vehicle can close the power windows/sunroof via the driver's door key (including several models of Mercedes Benz, BMW, Volkswagen and Jaguar), the system's integrated timer and an optional relay can be used to automatically close the power windows and sunroof every time you arm the system with your remote control.
- ☑ Smart Remote Boot Release Capability An electronic interlock assures that the optional remote boot release can be activated only when the system is disarmed. To further prevent any possibility of unintentional opening of the boot, the interlock also makes sure that the boot release cannot be remotely activated while driving.
- **☑** Enhanced User-Selectable AutoArming Automatically arms itself "passively" if you forget to arm it with the remote control.
  - AutoArming Enable/Disable You may disable or re-enable the AutoArming feature with just a few flicks of a switch.
  - *AutoArm & Lock* You may set the system to automatically lock the doors every time the system AutoArms.
  - Visual Indication Two side light flashes signal that the 30-second countdown to AutoArming has started.
  - User-Selectable 15-Second Entry Delay If you ever temporarily lose the use of your remote controls, an entry delay allows you to enter the vehicle and turn on the ignition without sounding the siren.
  - Instant AutoArm Bypass Just a quick turn of the ignition switch bypasses AutoArming for one cycle perfect when fueling the vehicle. AutoArming is automatically restored the next time you park.
- ✓ Advanced CMOS Microcomputers Multiple, very large scale integration
  (VLSI) microprocessors command all system functions more than 1,000,000
  times per second, yet they draw less power than the vehicle's clock.
- Patented Remote Control Code Learning with MultiRemote Recognition— Just a few flicks of a switch lets you match to the system up to 4 different 16-channel Clifford remote controls. Just as easily, a lost or stolen remote control can be deleted from the system memory.

- ✓ Patented Smart AutoTesting
   Automatically tests all triggers and sensors every time you remotely arm and warns you if you accidentally arm the system with the bonnet, boot or a door ajar. If there is a genuine trigger or sensor malfunction, the system will specifically identify the problem, thereby eliminating time-consuming and costly trouble-shooting.
- ☑ Patented Malfunction AutoBypass with Automatic Monitoring In the unlikely event of a trigger or sensor malfunction, AvantGuard III will automatically bypass the malfunction and arm all other points to continue relentless protection of the vehicle. If you simply left the bonnet, boot or a door open when you armed, just close it and the system will again monitor that trigger point.
- ✓ Multiple-Event TotalRecall— The AvantGuard III's memory stores the identity of the last eight trigger and sensor activations. This provides an invaluable diagnostic means, since, whenever you wish, the system will visually identify the activated triggers and sensors in reverse chronological order.
- ✓ Patented Smart Prior Intrusion Attempt Alert When you return to your vehicle and disarm your AvantGuard III, a special chirp and side light flash sequence will audibly and visually alert you from a distance if an intrusion attempt was foiled while you were away. Your AvantGuard III will even identify the specific trigger or sensor that detected the intrusion attempt.
- ✓ Multiple-Car Control You can interface your 16-channel remote controls with Clifford ACG systems on up to seven of your other vehicles.
- ✓ High-Luminescence LED Status Indicator with Automatic Battery-Saving
  Mode Adds visual deterrence and identifies system status. To conserve
  vehicle battery power (since the LED draws more current than the control
  unit), if the system has remained continuously armed for 48 hours, the flash
  rate will automatically slow to half the normal rate. If left continuously
  armed for 96 hours, the flash rate will slow to one-quarter the normal rate.
- ✓ Multiple Sensor/Trigger Inputs
   Separate inputs for two sensors as well as separate inputs for the doors, boot and bonnet allow for precise trigger/sensor identification.

- ✓ Full-Time Programming Access

   You can easily change the status of dozens of user-selectable features at any time, even while driving. Clear, audible signals confirm each feature selection and setting.
- ✓ Patented SmartPowerUp II When power to the system is disconnected, the system's non-volatile memory always remembers the last state (armed, disarmed or valet mode) and returns to that state when power is restored. So if a thief disconnects the power, the Smart Self Powered Medallion Siren will instantly sound and the starter and ignition systems will remain immobilised. If the thief then restores power in an attempt to start the car, the system will re-arm and again sound the siren, flash the side lights and continue its immobilisation of the starter and ignition until you can retrieve your vehicle and disarm the system via your remote control or by entering your secret valet code.

# Welcome to the world of high-technology vehicle security and convenience

ongratulations on the purchase of your AvantGuard III vehicle security/convenience system. Clifford Electronics has long been recognised as the world's leading manufacturer of high-technology vehicle security systems and accessories. In fact, Clifford Electronics holds more patents than all other vehicle security manufacturers combined. Buying Clifford has always meant buying the best, and nowhere is our commitment to technological innovation, reliability and quality more evident than in the astounding top-of-the-range AvantGuard III.

Your AvantGuard III is loaded with protective features and lifestyle conveni-ence benefits that other car alarm companies don't even have on their wish lists, let alone their alarms. Remote engine starting is the most obvious and most convenient feature of your AvantGuard III, especially on those blisteringly hot summer days and frigid winter mornings. But there's also Anti-CodeGrabbing (ACG) that fights off the latest and most onerous threat from high-tech thieves. A thief equipped with a code-grabber can record with total impunity the codes of any car alarm's remote control from up to several hundred metres away. As soon as the driver arms his or her alarm and walks away, the thief simply plays back the code, instantly disarming the alarm and unlocking the doors. It's like giving the thief your car keys. Code-grabbing will instantly defeat other brands of remote controlled car alarms, regardless of whether they are equipped with "anti-scanning" or "trillions of remote control codes" — but Clifford's ACG feature stops them dead in their tracks.

AvantGuard III's unique PlainView Coded Valet Switch ensures that no thief or joy-rider can turn off your AvantGuard III like they can with all other car alarm brands. For total freedom from incorrectly adjusted sensors, there's remote controlled adjustment of the system's dual-zone radar sensor and dual-zone vibration/impact sensor. Plus there's remote controlled valet mode, remote controlled sensor zone override, selectable automatic engine starting if your car battery starts to die or the engine temperature drops below freezing, complete headlight automation with remote headlight activation, user-programmable MultiSound Medallion Siren that will blare even if a thief disconnects power to your AvantGuard III or even cuts all the siren wires, smart automatic locking/unlocking if you ever "panic" the system, full-time programming access (even while driving), and much, much more.

Yet despite all the sophistication, the AvantGuard III is amazingly easy to use: never more difficult than a few flicks of a switch or a press of a button on one of your miniature keychain remote controls.

#### Your 4-button/16-channel remote controls

The 4-button/16-channel rosewood-style remote controls are ultra-sophisticated miniature radio transmitters powered by a tiny 12-volt battery. A weak remote control battery will reduce the remote's range. Electrical interference and even sunspots can interrupt the signal from your remote to the system. If this happens, repeatedly press the button (this works better than holding the button down). You will use your remote control to arm and disarm the system, start and stop the engine, lock and unlock the doors, activate the panic feature, adjust the sensors, enable/exit valet mode, turn on the headlights, override one or both zones of the radar sensor and command options such as a remote boot release, garage door interface, and/or other options.

#### How to use your keychain remote control

Your remote control can individually command up to 16 different system functions and options. It's like having a TV with 16 channels. You change channels (functions) with your keychain remote control. But instead of putting 16 buttons on the remote control, we made it easy: First, the button you use the most — button 1 to arm, disarm, lock and unlock — is larger than the others. Buttons 2, 3 and 4 are the smaller buttons to the right, below and left of button 1. The *LevelShift* button on the side of the remote control allows you to select channels 5–16:

LED indicator

Button 4

Button 3-

Button 1

LevelShift

button

Button 2

- To transmit either channel 1, 2, 3 or 4: Just press either button 1, 2, 3 or 4. For instance, to transmit channel 3, press button 3. While you transmit, the LED indicator will flash once every second: this indicates level 1.
- To transmit either channel 5, 6, 7 or 8: Press the LevelShift button once. This shifts buttons 1–4 to level 2 (channels 5–8). Then press the desired button
  - within the next 7 seconds. For instance, to transmit channel 5, press the LevelShift button once, then press button 1. While you transmit, you'll notice that the LED indicator flashes twice, pauses, flashes twice, etc.: this indicates level 2.
- To transmit channel 9, 10, 11 or 12: Press the LevelShift button twice. This shifts buttons 1–4 to level 3 (channels 9–12). Then press the corresponding button within the next 7 seconds. For instance, to transmit channel 10, press the LevelShift button twice, then press button 2. While you transmit, you'll notice that the LED flashes three times, pauses, flashes three times, etc.: this indicates level 3.
- *To transmit channel 13, 14, 15 or 16*: Press the LevelShift button three times then press the corresponding button. For instance, to transmit channel 15, press the LevelShift button twice, then press button 3. While you transmit, you'll notice that the LED flashes four times, pauses, flashes four times, etc.: this indicates **level 4.**

*NOTE*: One second after you stop transmitting level 2, 3 or 4 (channels 5–16), the remote control automatically returns to level 1 (channels 1–4).

#### What each button/channel does

Your AvantGuard III remote controls come pre-programmed so that certain channels command certain functions. The following chart indicates what each remote control channel number does, and how to transmit each channel number.

Factory settings of the 16 remote control channels					
Transmitting channel number:	Causes the system to:		How many times?	Press button number	
1	arm or disarm and lock or unlock the doors		_	1	
2	pop the boot* (if the system is <b>disarmed</b> )  AND  turn on the headlights (if the system is <b>armed</b> )	no	_	2	
3	silently arm or disarm	no	_	3	
4	activate an optional accessory or, on some vehicles, automatically close the windows and sunroof when you remotely arm*		_	4	
5	remotely start or shutdown the engine	yes	once	1	
6	activate optional accessory or control a Clifford system on another car	yes	once	2	
7	activate optional accessory or control a Clifford system on another car	yes	once	3	
8	activate optional accessory or control a Clifford system on another car	yes	once	4	
9	remotely enter or exit valet mode (see page 19)	yes	twice	1	
10	remotely turn off one or both Proximity Sensor zones if the system is <b>armed</b> (see page 22) <b>AND</b> turn on the AutoStart mode previously selected if the system is <b>disarmed</b> (see page 29)	yes	twice	2	
11	remotely adjust sensitivity of the Proximity Sensor's passenger compartment alarm zone (see page 21)	yes	twice	3	
12	remotely adjust sensitivity of the Proximity Sensor's exterior warning zone (see page 21)	yes	twice	4	
13	activate optional accessory or control a Clifford system on another car	yes	three times	1	
14	activate optional accessory or control a Clifford system on another car		three times	2	
15	remotely adjust sensitivity of the Piezo Sensor's primary alarm zone (see page 21)	yes	three times	3	
16	remotely adjust sensitivity of the Piezo Sensor's secondary warning zone (see page 21)	yes	three times	4	

<sup>\*</sup> May require additional wiring.

TO ARM THE SYSTEM	Press button 1 (channel 1) once. You will hear <i>two chirps</i> and the side lights will flash twice. The dashboard LED will flash repeatedly and the car doors will automatically lock. On certain vehicles, if so wired, the power windows and sunroof will automatically close.			
TO DISARM THE SYSTEM	Press button 1 (channel 1) again. <i>One chirp</i> and one side light flash confirms disarming. The doors will unlock and the interior lights will turn on and stay on for 30 seconds or until you start the engine, whichever occurs first. In addition, the system automatically adjusts the driving position to the settings you have programmed into your car's memory seat button (see page 20 for further details).			
TO SILENTLY ARM OR DISARM THE SYSTEM	Press button 3 (channel 3). Your AvantGuard III system will arm or disarm with all the indications noted above <i>except</i> for the chirp acknowledgments.			
TO ACTIVATE THE PANIC FEATURE	Press button 1 for three seconds. The lights will flash repeatedly and the siren will blare for 30 or 60 seconds (user-selectable), or until you press button 1 again to turn it off. If the ignition is on (indicating you are in the car), the doors will automatically lock to prevent an assailant from entering. If the ignition is off, the doors will unlock, allowing you to enter without fumbling with your keys.			
TO REMOTELY TURN ON THE HEADLIGHTS	Button 2 (channel 2) controls an electronic interlock that lets you separately command <i>two</i> options with the same channel: <i>one when the system is armed and another when disarmed</i> . Pressing button 2 while the alarm is <i>armed</i> will turn on the headlights for any duration you wish between one second and two minutes (factory setting is 30 seconds; see <i>User-selectable features</i> on pages 31-35).			
TO REMOTELY OPEN THE TRUNK RELEASE	Button 2 (channel 2) can control an optional remote boot release when the system is <i>disarmed</i> . Pressing button 2 while the alarm is <i>disarmed</i> will open the boot if you have this option installed.			
TO REMOTELY START OR SHUTDOWN THE ENGINE	Before attempting to remotely start the engine, please read the sections <i>Remote Engine Starting</i> and <i>Remote Starting DOs and DON'Ts</i> on pages 28-30. Channel 5 (LevelShift once, then button 1) instructs your AvantGuard III to remotely start your vehicle's engine and any preset accessories (or to shut the engine down if it			

confirmation.

is already running under the control of your AvantGuard III). The side lights will flash twice to acknowledge your command, then will light and stay lit while the engine idles for on-going

TO ACTIVATE OTHER OPTIONS REGARDLESS OF ALARM STATE	Button 4 (channel 4) and channels 5–8 and 13–14 (see <i>How to use your keychain remote control</i> on page 14) can activate accessories such as remote power window control, electric garage door and entry gate opener(s), Clifford ACG systems on your other vehicles, etc.
What about channels 9 – 12, 15 & 16?	Channels 9 through 12 and 15 and 16 control remote valet mode entry/exit (see page 19), remote override of one or both zones of the system's Proximity Sensor (see page 22), AutoStart (see page 28), and remote adjustment of each of the two system sensors (see page 21).

#### How to interpret the chirps and side light flashes

When you use the remote control, the system responds with chirps (unless the chirp muting feature is turned on) and side light flashes. *These chirp/flash acknowledgments mean:* 

Chirps and/or flashes	Meaning			
1	Your system is disarmed or you have remotely exited valet mode (see page 19)			
Your system is armed <i>or</i> you have remotely engaged valet mode (see page 19) have signaled the system to start the engine (see <i>Remote Engine Starting</i> on page).				
2 and then 4 Armed but there is a door ajar (if there was a 5-sec. delay) or one of the senso malfunctioning (if there was a 10-sec. delay) (see Smart AutoTesting on page				
3	Disarmed but there was an intrusion attempt while you were away (see Smart prior intrusion attempt on page 25)			
4	Armed but the bonnet or boot is ajar (see <i>Smart AutoTesting</i> on page 24), or confirms remote override of the Proximity Sensor zone(s) (see <i>Remote controlled override of one or both Proximity Sensor zones</i> on page 22)			

#### Anti-CodeGrabbing (ACG) with Random Code Encryption

A Clifford exclusive that protects you and your automobile from the most effective and onerous car stealing device ever used by car thieves — a code-grabber. Code-grabbers are far more effective and efficient than scanners. Unlike scanners that sequentially transmit one digital code after another until they hit the correct code to disarm the alarm (a process that may take minutes to years depending on the system's total number of codes), code-grabbers literally record, from hundreds of metres away, the code sent by your car alarm remote control. Then the thief simply plays back the code when you're gone, instantly disarming the alarm and unlocking the doors. It's like giving the thief your car keys. Non-Clifford alarms can be defeated that easily. In contrast, Clifford systems with ACG use complex digital signal processing and unbreachable encryption to randomly change the digital code every time you use the remote control. Your remote will *never* transmit the same code twice, and the control unit will *never* accept the same code twice. Thus the code recorded and played back by the thief's code-grabber will never be accepted by your AvantGuard III.

#### Extended accessory power

How many times have you parked and turned off the ignition only to realise that you forgot to close one of the power windows? Now your AvantGuard III will *continue* to power your vehicle's power windows, car stereo and other accessories even after you park and turn off the ignition, withdrawing power only when you open the driver's door.

#### **AutoArming**

If this feature is enabled and you forget to remotely arm, the system will automatically arm itself 30 seconds after all the doors are closed. For your convenience, if you re-open any door(s) within the 30-second countdown, AutoArming will restart from the beginning once all doors are closed. Your AvantGuard III has these additional AutoArming features:

- AutoArming enable/disable: If you prefer, you may deactivate or reactivate the AutoArming feature. See *User-selectable features* on pages 31-35.
- *Visual acknowledgment:* Five seconds after you exit the vehicle and close all the doors, the side lights will flash twice to confirm that the AutoArming countdown is progressing. Then, 25 seconds later, the system will AutoArm.
- AutoArm & Lock: To ensure you can't accidentally lock your keys inside the car, the system is factory-set **not** to lock the doors upon AutoArming. To change this setting, see *User-selectable features* on pages 31-35.
- *User-selectable entry delay:* If you temporarily lose the use of your remote controls, you may turn on the 15-second entry delay feature. This allows you to enter the car and silently disarm the system by turning on the ignition within 15 seconds of opening the door. See *User-selectable features* on pages 31-35.
- Instant AutoArming bypass: Prevents AutoArming when fueling the vehicle and other times when you wish to temporarily bypass AutoArming. To activate Instant AutoArming Bypass, rapidly turn the ignition switch to "ON" then "OFF." You will hear a single siren chirp to confirm that the system will not AutoArm. The system will revert to its normal operating mode when you next start the engine.

#### UltraSecure Coded Valet Mode

#### Your secret valet code

In seconds, thieves can disable all other alarm brands by hotwiring the ignition and flicking an easy to find "hidden" valet switch. Your system has safeguards that absolutely ensure a thief cannot enable the valet mode as a way of "turning off" your system. How? To enable valet mode, the driver must first enter a secret valet code on the PlainView switch. Your code will be a 1-to-3-digit number of your choosing. Each digit can be any number from 1 to 9. Whenever the system is in valet mode, it overrides AutoArming (see above) and all the security features are turned off. At various times, you will need to switch the system off. For instance, when having your car serviced, washed or parked by a valet.

#### Your factory-set valet code is the single digit "2."

Remember: When your car will be driven by someone else (such as a mechanic), you MUST engage the valet mode, otherwise your car will be immobilised

NOTE: If you temporarily lose the use of your remote controls, you can disarm the system by enabling valet mode.

#### **Definitions**

- *Digit*: A digit is defined as any number from 1 to 9, inclusive.
- Valet code: A valet code may be 1 to 3 digits:
  - A one-digit code=X=any number between 1-9
  - A two-digit code=XY=any number between 11-99 (excluding numbers with zeros)
  - A three-digit code=XYZ=any number between 111-999 (excluding numbers with zeros)

#### Remember, no code can have a zero.

- PlainView switch: A rocker switch mounted on the dashboard or console. The switch has three positions: 1.) Latched 2.) Centre 3.) Spring-loaded momentary. When you press the latched side, the switch remains in its pressed position. When you press the momentary side, the switch bounces back to the centre position.
- Entering a digit: To enter a digit, you tap (press and release) on the momentary side of the PlainView switch the number of times corresponding to the numeral of the digit to be entered, followed by pressing to the latched side, then returning the switch to its centre position.
- Entering a code: If your code has only one digit, enter the code as described in "Entering a digit." If your code has more than one digit, just repeat the above for each digit of your code.

#### To enable valet mode

- 1. Turn the ignition switch to its "ON" position or start the engine.
- 2. Enter your secret valet code on the PlainView switch.
- 3. You now have 5 seconds to press the *latched* position to enter valet mode. The system's LED will glow continually for on-going visual confirmation of valet mode.

#### To exit valet mode

- 1. Turn the ignition switch to its "ON" position or start the engine.
- 2. Flick the switch back to its centre position. The LED will turn off to confirm that the system is now in its normal operating mode.

#### Remote controlled valet mode entry and exit

You can even enable or exit valet mode with your remote control simply by transmitting channel 9 (LevelShift twice, then button 1). In addition to the above indications, two side light flashes will confirm that you have remotely enabled valet mode, while a single flash confirms exiting of valet mode.

#### Keyless entry in valet mode

Even if valet mode is enabled, you can still use the remote control to command the system's convenience features. For instance, simply press button 1 (channel 1) as if you were disarming and the doors will unlock (confirmed by one side light flash) and the interior lights will turn on. Press button 1 again and the doors lock (confirmed by two side light flashes). You can also use the other channels to start the engine and activate options such as a remote boot release.

#### Setting your own secret valet code

Since all Clifford systems have the same factory-set valet code, it is highly advisable that you set your own valet code. You may choose any 1-, 2-, or 3-digit code that does not have any zeros. You can also change your valet code whenever you want. Simply write down the 1-to-3 digit code you wish to use (remember, no zeros in the code), then refer to the *User-selectable features* section on pages 31-35.

#### Example

Let's say you want to set your valet code to 31. To do so, you would do the following:

- 1. From the *Table of user-selectable features* on pages 34 and 35, you would note that the "set a new secret valet code" feature is in column 4, row 6.
- 2. Enter program mode by turning on the ignition, entering your current valet code, then pressing the PlainView switch to its momentary side for 3 seconds until you hear a chirp.
- 3. Select column 4 by moving the switch between latched and centre 4 times, i.e.: latched, centre, latched, centre, latched, centre, latched, centre. After a brief pause, you will hear 4 chirps to confirm that you have selected column 4.
- 4. Select row 6 by pressing and releasing the momentary side of the switch 6 times. To help you count, you will hear a chirp each time you press the momentary side.
- 5. Immediately flip the switch to the latched position.
- 6. Enter you new code. To enter 31 as your new code, you would press the switch in this manner: momentary, momentary, momentary, latched (you'll hear 3 chirps to confirm the first digit), momentary, latched (1 chirp to confirm the second digit), centre.
- 7. Wait 3 seconds until you hear 2 chirps, indicating the new code has been accepted.
- 8. Turn off the ignition to exit program mode (you'll hear a 3-chirp confirmation).
- 9. VERY IMPORTANT: You must immediately test your new secret valet code: Turn on the ignition, enter your new code, then flip the switch to its latched position. The LED will illuminate. If it does not, the new code you programmed and the one you just entered do not match. In such a case, the system will revert to the previous code.

#### Remote controlled seat positioning

If your vehicle is equipped with power memory seats, the AvantGuard III can automatically adjust the driving position to your requirements before you even enter the vehicle. Just remotely disarm and AvantGuard III will automatically activate the vehicle's factory memory seat setting. What's more, AvantGuard III lets you define which remote control activates which memory position. That means when you disarm with your remote, the system will adjust the seating position to your settings. When your spouse disarms with the other remote, the seating position will automatically adjust to your spouse's settings. In other words, when you disarm with remote #1, AvantGuard III will automatically activate the vehicle's memory seat position #1; when disarmed with remote #2, memory position #2 is activated, and so on in any combination you wish using up to four different remote controls and four different memory positions.

The two remote controls that came with your AvantGuard III have been preset to activate your vehicle's memory positions #1 and #2. You can change the assignments of these two remote controls and/or associate additional remote controls with other memory positions. See *User-Selectable Features* on pages 31-35.

#### **Dual sensors**

Your AvantGuard III system has both a Digital Dual-Zone Proximity Sensor IV and a Dual-Zone Piezo Sensor.

The Digital Dual-Zone Proximity Sensor IV is a microprocessor-controlled passenger compartment radar sensor that provides full perimeter protection: If someone is lurking near your car, the sensor's exterior warning zone will trigger the system to sound a one-second warning tone, but if a thief actually leans into the passenger compartment through an open window or tries to cut through a soft-top, the sensor instantly triggers the system to blast the siren, flash the side lights and immobilise the starter and ignition system. What's more, thanks to Clifford Electronics' advanced engineering, this new-generation radar sensor uses only 30% of the power required by other radar sensors (so it won't drain your car battery), yet provides better sensitivity and far more precise discrimination between genuine threats to your vehicle and everyday environmental conditions that cause other radar sensors to false alarm.

The Dual-Zone Piezo Sensor is an all-electronic vibration/impact sensor. If someone forcefully leans on your parked vehicle or lightly taps the bumper while parking, the Piezo Sensor's warning zone will cause the system to issue a warning (a different sound than that triggered by the Proximity Sensor, so you can easily distinguish between the two). However, if there is any genuine intrusion-related tampering, the Piezo sensor will instantly trigger the system to blast the siren, flash the side lights and immobilise the starter and ignition system. Unlike other vibration/impact sensors, the sensitivity settings of the Dual-Zone Piezo Sensor are impervious to temperature variations.

Both sensors are completely adjustable by you with just a few presses on your remote control. This makes it particularly easy to reduce the sensitivity a few steps when, for instance, in a vibration-prone parking area such as a busy road with large trucks and buses passing close to your vehicle.

#### Remote controlled sensor adjustments

Unlike other alarm sensors, *you* can adjust sensitivity of the two system sensors electronically without tools and without even knowing where they are mounted! If the setting(s) of the Dual-Zone Proximity Sensor IV and/or Dual-Zone Piezo Sensor are either too sensitive or not sensitive enough, you may individually test and adjust the settings of each zone. To make adjustments, just use the following procedure:

- 1. **Disarm** the system with the remote control, open the driver's window (if adjusting the Proximity Sensor), then select the sensor and sensor zone you wish to adjust:
  - a. *Proximity Sensor interior alarm zone*: Transmit **channel 11** (LevelShift twice, then button 3).
  - b. *Proximity Sensor exterior warning zone*: Transmit **channel 12** (LevelShift twice, then button 4).
  - c. *Piezo Sensor primary alarm zone:* Transmit **channel 15** (LevelShift three times, then button 3).
  - d. *Piezo Sensor secondary warning zone*: Transmit **channel 16** (LevelShift three times, then button 4).
- 2. To **test** the current sensitivity setting of the sensor zone you selected:

- a. *Proximity Sensor alarm zone*: Lean into the passenger compartment. You'll hear a chirp when the zone detects your presence. Ideally, it should chirp when you lean over the driver's seat, but remain silent as you lean toward the window.
- b. *Proximity Sensor warning zone:* Lean toward the driver's window. You'll hear a chirp when the zone detects your presence. Ideally, it should chirp only when you move within one foot of the vehicle, as a thief would do to see what was inside.
- c. *Piezo Sensor alarm zone*: Firmly "thump" the top of the window pillar. You will hear a chirp if the strike was firm enough to trigger the alarm zone of the sensor.
- d. *Piezo Sensor warning zone:* "Thump" the top of the window pillar with somewhat less force than noted above. You will hear a chirp if the strike was firm enough to trigger the warning zone of the sensor.
- 3. If you are not satisfied with the detection level and wish to **increase** sensitivity, press **button 2** on your remote control. To **decrease** it, press **button 4**. Each time you increase sensitivity, the siren will chirp in higher and higher pitched tones to confirm the higher sensitivity setting. Conversely, lower and lower tones confirm each sensitivity decrease. Three normal tone chirps indicate minimum and maximum settings. There are 32 sensitivity levels for each of the Proximity Sensor's two zones; the alarm zone of the Piezo Sensor also has 32 levels, while the less critical warning zone has 16 steps.
- 4. Repeat steps 2 and 3 until you are satisfied with the sensitivity, then press **button 1** to record the new sensitivity setting and exit the sensor test/adjust mode (you'll hear three chirps to confirm exit). You may now either repeat steps 1–4 for the other sensor and/or sensor zone, or press button 1 again to arm the system.

Sound complicated? It really isn't, there's just a lot of explanation of what's happening with each step. All you really have to do is the actions noted in **bold type**. Give it a try.

#### Remote controlled override of one or both sensor zones

Transmitting channel 10 within 10 seconds of arming the system will override the exterior warning zone of the Proximity Sensor (you'll see 4 side light flashes to confirm the zone override). This is useful when parking in an area with heavy pedestrian traffic. Transmitting channel 10 again within the 10 second period will override *both* zones of the sensor for those times when you must leave a passenger or pet in the vehicle. The sensor zones are automatically restored the next time you arm the system.

#### How to interpret the LED status indicator

The LED on your car's dashboard or console will inform you of the system status:

LED Condition	Meaning			
Off	System is disarmed and in normal operating mode (i.e., valet mode is off)			
On Valet mode is on, the vehicle can be driven or serviced without having to dis				
Flashing	System is armed and protecting your vehicle			
Pause between flashes Either a malfunction occurred or an intrusion was attempted (see pages 24-2				

#### Automatic battery-saving mode

To conserve vehicle battery power (the LED draws more current than the entire control unit) if the system has remained continuously armed for 48 hours, the flash rate will automatically slow to half the normal rate. After 96 hours, it slows to one-quarter.

#### **NightVision**

All of the following NightVision Headlight Automation features are built into your AvantGuard III:

- *User-selectability:* You may turn the NightVision features on or off whenever you wish (see *User-Selectable Features* on pages 31-35).
- *When driving at dusk*: The system automatically turns on the headlights.
- When driving at dawn: The system automatically turns off the headlights.
- Precision activation: NightVision automatically and unerringly turns the headlights on or off only when necessary. For instance, if it is dark when the car's engine is started with the key, NightVision instantly turns on the headlights (if the engine was remotely started, the headlights will instantly turn on when you turn your key to the "ON" position). However, when the vehicle is driven under an overpass in daylight, the headlights will not turn on. Even more importantly, when passing through a very brightly lit area at night, the headlights will not switch off. However, if you drive into a dark parking structure during the day, NightVision will turn on the headlights within five seconds of entering the structure.
- When you park your car at night: NightVision keeps the headlights on for any duration of your choice between 1 sec. and 2 min. (factory preset to 30 sec.; to change the duration, see *User-selectable features* on pages 31-35) after you turn off the engine to light your path away from the vehicle. If you prefer you can turn off the post-parking illumination feature and still retain all the other NightVision features (see *User-selectable features* on pages 31-35).
- *SilentNight:* If you wish, you can set the system to automatically silence the normal arm/disarm chirps at night, yet sound them when you remotely arm and disarm in daylight. See *User-selectable features* on pages 31-35.
- RainCheck—rainy day safety feature: When you turn on the windscreen wipers
   day or night NightVision automatically turns on the headlights and keeps
  them on for as long as the wipers are on. This feature delivers an extra margin of
  driving safety since it increases the vehicle's visibility to all other drivers on the
  road. This is a real battery-saving feature since you don't need to remember to turn
  off the headlights after driving in the rain during daylight hours.
- Manual control of headlights: If you wish to manually turn on the headlights, simply turn on your vehicle's headlight switch.

#### FACT— False Alarm Control and Test

With FACT, you'll never experience repeated false alarms. If the MultiSound Medallion Siren goes off, DO NOT remotely disarm the system; allow it to run for the full siren duration of 30 or 60 seconds (user-selectable). Before sounding the siren a second time, the system automatically checks for another activated trigger to verify that an intrusion is in progress. Should the siren sound again, you will know for sure that someone is tampering with your vehicle. (To disable FACT, see *User-selectable features* on pages 31-35.)

#### Smart AutoTesting

Each time you remotely arm the system, it tests all triggers and sensors. If the **bonnet or boot** is open when you remotely arm, the system will **immediately** alert you of the problem by sounding **4 chirps** and **4 side light flashes** instead of the usual 2 and 2. If a **door** is ajar, you will receive the usual 2 chirps and flashes, then, **5 seconds later**, there will be **4 chirps** and **4 flashes** (the door ajar warning will not work on vehicles that have delayed or dimming courtesy lights). If a **sensor** is malfunctioning, you will receive the usual 2 chirps and 2 flashes, then, **10 seconds later**, there will be **4 chirps** and **4 flashes**.

NOTE: Since this is a warning indication, you will hear the 4 chirps even if you are using the chirp muting feature.

- Specific malfunction identification: The system can indicate the specific trigger or sensor that is malfunctioning. If you receive the 4-chirp/4-flash signal upon remote arming, perform the following to identify the malfunctioning trigger or sensor:
- 1. Remotely disarm, then turn on the ignition. The LED status indicator inside your vehicle will be flashing, pause, then repeat.
- 2. Count the number of flashes in one cycle between pauses (for your convenience, the flash cycle repeats a total of 5 times) and refer to the chart below:

Number of LED flashes between pauses	Sensor/trigger indication	
1 flash	Proximity Sensor	
2 flashes	Piezo sensor	
3 flashes*	Door trigger*	
4 flashes	Boot trigger	
5 flashes	Bonnet trigger	

<sup>\*</sup> If your vehicle has a factory-installed feature that turns off or dims the interior courtesy lights several seconds after you exit the vehicle, the system cannot provide this feature.

#### Automatic malfunction bypass

To provide the utmost protection even if a system component malfunctions, the system will automatically bypass any faulty point and arm all *other* triggers and sensors to provide the utmost possible protection until you can have the system serviced by your local Authorised Clifford Dealer. If you accidentally armed the system with the bonnet, boot or a door open, just close the open point and the system will again monitor that point.

#### Multiple-event TotalRecall

The system's memory records the identity of the last eight activated or malfunctioning triggers and sensors, which allows your installer to instantly track down malfunctions. To identify the triggers and sensors held in the system's memory, use the following procedure:

- 1. With the ignition OFF, flick the PlainView valet switch to its latched side.
- 2. Press button 1 to "arm" the system, then again to "disarm."
- 3. The LED will flash 1–5 times to indicate the most recently activated point, pause, flash 1–5 times to indicate the next most recently activated point, and so on.
- 4. Write down the number of flashes between pauses and refer to the chart above.

#### Smart prior intrusion attempt alert

If you hear three chirps when you remotely disarm, it means that a trigger or sensor was activated in your absence. When you enter the vehicle and turn on the ignition, the LED will flash 1–5 times, pause, then repeat the flash cycle 4 more times. Count the number of flashes in one cycle and refer to the chart on page 24

#### AutoLock and AutoUnLock

For your safety and that of your passengers, the doors automatically lock when you start driving at about 15-20 mph, and automatically unlock when you park the vehicle and turn the ignition off. To suit your preferences, you may turn off *either or both* the AutoLock and/or AutoUnLock features. What's more, if you prefer to have the system AutoLock the doors the instant the ignition switch is turned on, you may do so. See *User-Selectable Features* on pages 31-35.

#### Smart boot release option

If the remote boot release feature was installed, you may use the remote control's button 2 to remotely pop the boot. Your AvantGuard III has a built-in electronic interlock to prevent unintentional activation of the remote boot release when you drive, or when the system is armed.

#### Smart Self-Powered Medallion Siren with Digital ComLink

This siren has its own built-in back-up battery, so even if a thief cuts all the wires, the siren will *continue* to wail. Furthermore, this unique Clifford-designed and manufactured siren delivers 10 times the long-term reliability of "generic" sirens and provides all these important additional enhancements:

- Unbreachable Digital ComLink: Clifford Electronics' ingenious Digital ComLink is a serial communications link that ensures that if the system fuse is pulled, or if power to the system is interrupted, or if any siren wire is tampered with while the system is armed the siren will instantly activate for five minutes. However, if the system is disarmed or in valet mode (see page 18) and power is interrupted for authorised servicing, the siren will remain silent. This eliminates the need for a special separate shutoff key common to other battery-backed sirens (which one can rarely ever find when one really needs it). This ingenious Clifford feature guards against any possibility of a thief tampering with the system.
- Smart-charging: Other battery-backed sirens continually draw charging current from your vehicle's battery. In time, this can drain the car's battery. Clifford's Smart Self-Powered Medallion Siren only draws charging current while the vehicle's ignition is on, i.e., while you're driving. This prevents battery drain.
- Low battery warning: If at any time the siren's back-up battery voltage is low or it fails to hold its charge, the normal arm and disarm chirps will be muted to alert you of the problem. Once the back-up battery is charged, the chirps will automatically be restored.

- Personalised Siren Sounds: Most alarm sirens have a single "warble" tone. A few offer "six-tone" sirens that cannot be adjusted or require destruction of circuit wires to change the sounds (the change is permanent and cannot be changed again). Your AvantGuard III siren is different. As shipped from the factory, it sounds six different alarm sounds. However, you may turn any of the six sounds on or off to create a different combination of sound patterns. In all, there are 64 different combinations. You may set your own Personalised Siren Sounds so if you hear a siren at a distance, you will know for sure whether or not it is your car. See User-selectable features on pages 31-35.
- Long-term chirp silencing: Whenever you wish, you may silence your AvantGuard III's arm/disarm chirps until you wish to restore them. The indicator light flashes will continue to provide visual confirmation of remote controlled arming and disarming. See the *User-Selectable Features* section on pages 31-35.
- Remote controlled chirp muting: This feature is especially valuable when parking late at night in a quiet residential area. To arm or disarm silently, simply press button 3 on your remote control instead of the usual button 1.
- *QuietChirps*: You can control the volume of the normal arm and disarm chirps. As shipped from the factory, your system issues full-volume chirp confirmations. If you prefer, you may reduce the chirp volume to a level that is clearly audible, yet less obtrusive. See the *User-selectable features* section on pages 31-35.
- *Siren duration*: When the system detects an intrusion attempt, the alarm is set to sound for 30 seconds. However, if you prefer, you may change it to 60 seconds. See the *User-Selectable Features* section on pages 31-35.
- Automatic Noise Abatement: To ensure against battery drain and towing of the vehicle due to noise pollution, the siren will sound for no more than five siren duration cycles even if a door is left open in the wake of an intrusion. The system then automatically resets, rearms and monitors all other points to provide the utmost possible protection.

#### Adding new remote controls

For other drivers in your family, you can buy additional 16-channel remote controls from *any* Clifford Dealer and program them into the system yourself. Each AvantGuard III will respond to as many as four 16-channel remote controls, and you can also program them into Clifford ACG systems on your other vehicles. To add a new remote control to the system, use the procedures noted in the *User-selectable features* section on pages 31-35.

#### How to erase lost or stolen remote controls

If one of your remote controls is ever lost or stolen, you can remove it from the system memory to make sure that the missing remote control can never be used to disarm your system. To do so, use the "Erase all channels" feature (feature column 2, row 6 on the *Table of user-selectable features* on pages 34-35). This will clear all remote control codes from the system memory. Then simply program each remaining and/or replacement remote control as noted in the *User-selectable features* section on pages 31-35.

#### SmartPowerUp II

If power to the system is ever removed, SmartPowerUp II ensures the system will automatically restore itself to its previous state when power is restored. So if a thief disconnects the power and then restores it in an attempt to start the car, the system will re-arm and instantly sound the siren while immobilising the vehicle. If your vehicle is to be serviced by a mechanic, just put the system in valet mode via the remote control (see *Remote Controlled Valet Mode Entry and Exit* on page 19. If the mechanic needs to interrupt power, your system will automatically return to its valet mode state when power is restored; there will be no alarm activation and no need to provide your mechanic with your remote control and instructions on how to use it.

#### Remote Engine Starting

#### How to remotely start/shutdown the engine

**WARNING:** Always exercise caution and common sense when using the remote starting feature. **Never** remotely start the engine or engage the AutoStart feature when the vehicle is parked in an enclosed area without adequate ventilation. **Never** allow children to play with the remote control.

Whenever you remotely start the engine, the AvantGuard III rapidly makes a series of safety checks before attempting to crank the starter motor. It will:

- Verify that the engine or ignition switch is not already on.
- Verify that the engine is not overheated.
- Verify that no one is in the vehicle pressing the brake pedal.
- Verify that the bonnet is closed.

To remotely start the engine, transmit channel 5 (LevelShift once, then button 1). All of the following will occur:

- You will see *two side light flashes* to confirm startup initiation. (NOTE: four flashes indicate a fault condition, e.g., the bonnet is open).
- The engine and all preset accessories (air conditioner, heater, defroster, etc.) will start and run.
- While the engine idles, the side lights will remain illuminated for on-going visual confirmation.

When the engine is running under the control of your AvantGuard III, you may, if you wish, shut down the engine by again transmitting channel 5.

#### Diesel compatibility

If your vehicle has a diesel engine, your AvantGuard III will activate the engine's glowplugs for 20 seconds before actually starting the engine.

#### To drive the vehicle

- 1. Disarm and unlock the doors by pressing button 1 on the remote control. The side lights will flash off once and the interior lights will turn on.
- 2. Enter the vehicle and close the door, but do not press the brake pedal nor move the transmission out of park.
- 3. Insert your key and turn the ignition switch to its "ON" position (don't worry if you turn the switch all the way to the "START" position; the system's StarterGuard feature will prevent you from accidentally grinding the starter motor while the engine is running under the AvantGuard III's control). The interior lights will turn off and, if it is dark, the headlights will turn on.
- 4. Press the brake pedal. The system is now disengaged and your vehicle will operate as usual.

NOTE: As an anti-theft measure, if someone presses the brake pedal or moves the transmission out of park BEFORE turning the ignition switch to the "ON" position, the AvantGuard III will immediately shut down the engine.

#### The AutoStart features

Your AvantGuard III has two AutoStart features:

- AutoStart Battery Mode: This is an especially valuable feature when you need to leave your vehicle parked for an extended period of time. If engaged, the system will continually monitor the voltage level of the vehicle battery while you are away. If the voltage drops below a preset level, the system will automatically start the engine and recharge the battery (to conserve battery power, the AvantGuard III will not activate the side lights nor any preset accessories in this mode). Likewise, the system automatically shuts down the engine once the battery is properly charged or after 30 minutes, whichever occurs first. If needed, the process will repeat every eight hours until the battery is properly charged. AutoStart Battery Mode is automatically canceled as soon as you drive your car.
- AutoStart Temperature Mode: You may set AvantGuard III to AutoStart the vehicle if the temperature drops below 15°F (-9°C). The engine will idle for 30 minutes or until you enter and drive the vehicle, whichever occurs first. AutoStart Temperature Mode is automatically canceled as soon as you drive your car.
- AutoStart Dual Mode: This mode selection instructs the system to monitor both the battery voltage and temperature. Thus either condition will trigger AutoStart.

AutoStart is a two step process. You first select the AutoStart mode you want the system to use. You will later (this can be moments or months later) use your remote control to command the system to use the AutoStart mode you previously selected:

- 1. Use the programming procedure noted on pages 31-35 (column 4, row 4) to select either AutoStart Battery Mode, AutoStart Temperature Mode or AutoStart Dual-Mode.
- 2. Disarm the system with button 1, then transmit channel 10 (LevelShift twice, then button 2). The side lights will flash twice to acknowledge that the system is now in the AutoStart mode you selected in step 1.
- 3. Press button 1 to arm the system. Your AvantGuard III will remain in AutoStart mode until you next drive the vehicle.

#### ShortStop

This is a great feature when you need to make a stop at a convenience store or to make a quick delivery. Rather than shutting down the engine and then restarting it moments later, ShortStop lets you remove your car keys from the ignition switch without shutting down the engine. You may then exit and remotely arm the system while the engine continues to idle. To use the ShortStop feature, use the following procedure:

- Park the vehicle being sure to place the transmission in its park position and set the hand brake.
- 2. Make sure you are not touching the brake pedal, then transmit channel 5 as if you were remotely starting the engine (two side light flashes will confirm this action).
- 3. Turn the ignition off and remove your keys. The engine will continue to idle.
- 4. Exit the vehicle and arm the system with button 1 on the remote control. The engine will continue to idle under the control of your AyantGuard III for up to 30 minutes.
- 5. When you have completed your errand, just use the normal procedure noted in the *To drive the vehicle* section on page 28.

#### Remote Starting DOs and DON'Ts

#### DOs

- Park in an open, well-ventilated area.
- Always engage the parking brake.
- Make sure you put the transmission in PARK *before* shutting down the engine.
- Set the air conditioner, heater, defroster and other accessories to the desired levels.
- Turn on your vehicle's "recirculate" feature to warm/cool the interior more efficiently.
- Before engaging one or both AutoStart features, make sure the petrol tank is full.

#### DON'TS

## You must always exercise good judgment and common sense when using the remote starter:

- NEVER remotely start the vehicle in an enclosed area without sufficient ventilation.
- NEVER allow children access to the remote controls.
- NEVER engage the ShortStop nor one or both AutoStart features if the vehicle is in an enclosed area without adequate ventilation.
- NEVER remotely start or use the ShortStop feature with a person or pet in the car (exhaust fumes may leak into the passenger compartment).
- In case of transmission slippage, NEVER remotely start the engine if you or someone else is directly behind or in front of the vehicle.

#### User-selectable features

Your AvantGuard III allows you to set many of its features to your own personal preferences. Although the system's programming capabilities are very extensive, we have made the programming procedures very simple: to make a change, you just flick the PlainView switch a few times. Once you've changed a few settings, you'll find that programming AvantGuard III is so easy that you can even do it while driving! The system comes with all of its features pre-programmed as noted by the bold type in the *Table of user-selectable features* on pages 34-35. To change any of the settings, use the steps noted below. To restore the feature to its factory setting, just repeat the procedure or use the *Reset all features* option (see page 33):

#### How to change a user-selectable feature:

Briefly, here's how it will work:

- You will pick a feature from the Table on pages 34-35, noting the feature's column and row numbers.
- First you'll need to get into program mode by entering your valet code (see pages 18-19). After you have entered your valet code, press and hold the momentary side of the PlainView switch until you hear a chirp. You're now in the "Feature Select" position.
- Next you'll press the latched side of the switch a number of times identical to the column number. Lastly, you will press the momentary side of the switch a number of times corresponding to the row number.

That's all there is to it! After you enter the feature's column and row numbers, you'll pause for a second and hear either **one chirp** to indicate that the feature has been **turned off**, or **two chirps** if **turned on**. It's easy once you've done it. Try the examples on page 32 to get the hang of it.

#### Step-by-step programming instructions

- 1. Refer to the *Table of user-selectable features* and make note of the column (across) number and the row (down) number of the feature(s) you wish to program.
- 2. Turn on the ignition, or start the engine (skip this step if the engine is running).
- 3. Enter your **valet code** (see pages 18-19), then **press and hold** the PlainView switch to its **momentary** side for about 3 seconds until you hear a siren chirp (the system LED will also turn on to indicate that the system is in programming mode.) You are now in the "*Feature Select*" position at the top left of the table.
- 4. Select the feature column: **Toggle** the switch in and out of the **latched** position the same number of times as the column number of the selected feature (NOTE: each latched-to-centre motion is counted as one). **Pause**. You will hear the same number of chirps as the column number you have selected, audibly confirming your selection.
- 5. *Select the feature row:* **Press and release** the **momentary** side the same number of times as the feature's row number. You'll will hear a chirp each time you press.
- 6. If there is a *NOTE* for the selected feature, perform the actions noted.
- 7. Pause. You will hear either one or two chirps: Two chirps = ON, one chirp = OFF.
- 8. You may select another feature, or you may exit program mode:
  - a. To select another feature in that column, repeat step 5 within the next 10 seconds (after 10 seconds, 3 chirps mean you are now back in the "Feature Select" position).

- b. To select a different feature column, go to step 4.
- c. To exit program mode, turn the ignition off (you'll hear 3 chirps and the LED will turn off to indicate exit of programming mode). If driving, just wait 60 seconds and the system will automatically exit program mode.

#### **EXAMPLE 1:** Turn off siren sound number 2:

You can turn each of the siren's six different sound patterns on and off as you wish to create you own custom sound (see the *Personalised Siren Sounds* section on page 26 for more information) To turn off "Sound 2" you'll note that "Sound 2" is in column 1, row 2 of the table on pages 34-35. The "on" in bold type indicates the factory setting. The following example will turn that one sound off:

- 1. To enter program mode, turn on the ignition, enter your valet code (as noted on pages 18-19), then *hold* the switch in its *momentary* position until you hear a chirp.
- 2. Select column 1 by pressing *latched* and then back to *centre* (*wait* for the one chirp to confirm column 1). To select row 2, press *momentary twice* (you'll hear a chirp each time you press the momentary side).
- 3. After a brief pause, you'll hear *one* chirp to confirm that sound #2 is now *off*.
- 4. Turn the ignition off. You'll hear 3 chirps, confirming automatic exit from the programming mode. You're done!

If you make an error, just turn off the ignition and start again. To turn siren sound 2 back on, just repeat steps 1–4. In step 3, you'll hear *two* chirps to confirm that siren sound 2 has been turned back *on*. Remember, one chirp = off, two chirps = on.

**NOTE:** You have 10 seconds to enter the row number after selecting the column number. If you wait too long, the system jumps back to the "Feature Select" position (this is indicated with 3 chirps). If you wait another 60 seconds, the system will exit program mode.

In *Example 2* below, you'll learn how easy it is to change the settings of several different features in just one session, without having to repeatedly turn the ignition on and off:

#### EXAMPLE 2: Turn off siren sounds 4 and 6, then turn on QuietChirps:

This time, we will change the settings of three different features in just one programming session: We will turn off sounds 4 and 6 and turn on the QuietChirps feature (see page 26). Here's all you have to do:

- 1. *Enter program mode* as previously noted (ignition on, enter your valet code, press the momentary side until you here a chirp).
- 2. Since sound 4 is in column 1, row 4 of the Table, you will have to enter the latched side once and the momentary side four times. Therefore, move the switch to the latched position and back to centre. Wait for a single chirp to confirm the selection of column 1. Within 10 seconds, press and release the momentary side of the switch 4 successive times. You will hear a chirp after each single press. These chirps will help you count the number of presses. After a brief pause, you'll hear 1 chirp to confirm that sound 4 is now off.
- 3. Since sound 6 is in column 1, row 6 and is in the same column as you just entered for sound 4, there is no need in this case to again select column 1. Therefore, you can go right away to the row selection (momentary side of the switch). Now, within 10 seconds, press the *momentary side six times* to jump to *row 6*. After a brief pause, you'll hear 1 chirp to confirm that sound 6 is now off.

- 4. Now look up the location on the table of QuietChirps. Note that it's in *column 3*, *row 5* (latched, centre, latched, centre, latched, centre, wait for the 3-chirp/column 3 confirmation, then 5 momentary presses). After a brief pause, you'll hear two chirps to confirm that the QuietChirps feature is now on.
- 5. To exit the program mode, turn the *ignition off*. You'll hear 3 chirps to confirm program mode exit.

You just made three programming changes in only five steps. Easy, isn't it? Notice again that in step 3 on the previous page you did not have to re-select column 1. If you don't touch the switch, the system *stays* in the column for 10 seconds to allow you to select any other feature(s) in the same column without having to re-enter the column number. Of course, you can select a new column at any time.

If you wait more than 10 seconds, the system automatically jumps back to the "Feature Select" position. This is the "stand-by" position: ready for entry of a new programming selection. If no action is taken for the next 60 seconds, the system automatically exits program mode, perfect if you make a few programming changes while driving.

#### Reset all features

Whenever you wish, you may reset all the user-selectable features to their factory settings (factory settings are noted in **bold** type on the *Table of User-Selectable Features*). Doing so will reset all user-selectable features except your current valet code, nor will it erase the remote controls programmed into your system (to do this, use the column 2, row 6 Erase all remotes feature).

To reset all other user-selectable features, use the following procedure:

- 1. Turn on the ignition, or start the engine (skip this step if the engine is running).
- 2. Enter your **valet code** (see pages 18-19), then **press** and **continue holding** the PlainView switch to its **momentary** side for about **10** seconds. You will first hear a chirp (after about 3 seconds) to indicate that the system is in program mode. Continue holding to the momentary side. After about 10 seconds you will hear 4 rapid chirps, indicating that all user-selectable features except the valet code and remotes have been reset to their factory settings.

#### Table of user-selectable features: 1 chirp = OFF, two chirps = ON

Feature Select	Column 1 1st latched	Column 2 2nd latched	Column 3 3rd latched	Column 4 4th latched	Column 5 5th latched	Column 6 6th latched
Row 1 1st momentary	Sound 1: <b>on</b> /off info on page 26	Add new remote to channel 1 info on page 15 NOTE 1	AutoLock: <b>on</b> /off info on page 25	AutoArming: <b>on</b> /off <i>info on page 18</i>	NightVision: off/on but no post-parking illumination/on (1/2/3 chirps) <i>info on page 23</i>	Use this remote to activate which memory seat position? info on page 20 NOTE 6
Row 2 2nd momentary	Sound 2: <b>on</b> /off info on page 26	Add new remote to channel 2 info on page 15 <i>NOTE 1</i>	AutoUnLock: <b>on</b> /off info on page 25	AutoArm & Lock: on/ <b>off</b> info on page 18	Post-parking and remote headlight duration: 1sec–2.0min (30sec) info on pages 15 and 23 NOTE 5	Door ajar warning/delayed courtesy lights this feature is for installers only
Row 3 3rd momentary	Sound 3: <b>on</b> /off info on page 26	Add new remote to channel 3 info on page 15 <i>NOTE 1</i>	FACT: <b>on</b> /off info on page 23	15-second entry delay: <b>on</b> /off info on page 18	SilentNight: on/ <b>off</b> info on page 23	RPM-activated AutoLock: <b>on</b> /off info on page 25
Row 4 4th momentary	Sound 4: <b>on</b> /off info on page 26	Add new remote to channel 4 info on page 15 NOTE 1	AutoActivate channel 4 timed accessory upon remote arming this feature is for installers only	AutoStart: battery mode/ temperature mode/dual mode/off (2/3/4/1 chirps) NOTE 3	★ Channel 4 timer: 1sec-2.0min (30sec) info on page 15 NOTE 5	RPM programming this feature is for installers only
Row 5 5th momentary	Sound 5: <b>on</b> /off info on page 26	Add new remote to channel 5 info on page 15 NOTE 1	QuietChirps: on/ <b>off</b> info on page 26	Siren duration: 60/30 seconds (1/2 chirps) info on page 26	Channel 4 output type: pulsed/timed/latched this feature is for installers only	Lock pulse duration: 3sec/1sec this feature is for installers only
Row 6 6th momentary	Sound 6: <b>on</b> /off info on page 26	Erase all channels info on page 26 <i>NOTE 2</i>	Long-term chirp silencing: on/ <b>off</b> info on page 26	Set a new secret valet code info on page 20 NOTE 4	NOT USED	Diesel/gasoline fuel injection this feature is for installers only

<sup>\*</sup> WARNING: If the system automatically closes the power windows and sunroof when you remotely arm, DO NOT CHANGE THIS SETTING: It requires installer-only adjustment. Changing the duration may cause damage.

The grey cells indicate a feature that requires programming only by a qualified installer. DO NOT change any of the installer-only settings.

- NOTE 1: Transmit the appropriate channel of the new remote control. You will hear the same number of chirps as the channel selected (e.g., 3 chirps for channel 3) to confirm programming of that channel.
- *NOTE 2:* When you hear one chirp, all remote control channels will have been erased from the system memory. You must now add the new and/or existing remote controls to the system (i.e., program channels 1–5 of each remote control).
- NOTE 3: Press button 4 to turn AutoStart off (1-chirp confirmation), press button 1 to select AutoStart battery mode (2-chirp confirmation), press button 2 to select AutoStart temperature mode (3-chirp confirmation), press button 3 to select AutoStart dual mode (4-chirp confirmation). This selects the AutoStart mode. To engage AutoStart, you will later transmit channel 10 while the system is disarmed (see page 29 for more information).
- NOTE 4: Immediately flip the switch to its latched position, then:
  - a. Enter the new code that you wish to use. The system will sound the same number of chirps as the digit you choose when you move the switch to the latched side (e.g., if the first digit is 4, you'll hear four chirps when you press the latched side).
  - b. Make sure to return the switch to its center position when complete.

- c. Wait 3 seconds until you hear 2 chirps, confirming the new code has been accepted.
- d. Turn the ignition off. You'll hear 3 chirps and the LED will turn off.
- e. **VERY IMPORTANT: You must immediately test your new valet code:** Turn the ignition on, enter your new code, then flip the switch to its latched position. The LED will illuminate. If it does not, the new code you programmed and the one you just entered do not match. *The system has reverted to the previous code.*
- NOTE 5: The timer starts as soon as you select this feature. When the duration you wish has been reached, press remote control button 1. You'll hear two chirps to confirm the new duration.
- NOTE 6: After you select this feature, take the remote control you will be using and press either button 1, 2, 3 or 4 to select the vehicle's memory seat position 1, 2, 3 or 4, respectively, that has been set up for your driving comfort. For a second driver, select this feature, take the *other* remote control and press either button 1, 2, 3 or 4 to select the vehicle's memory seat position 1, 2, 3 or 4, respectively, that has been set for the secondary driver. You may do this with up to four different remote controls and up to four different memory seat positions, in any combination.